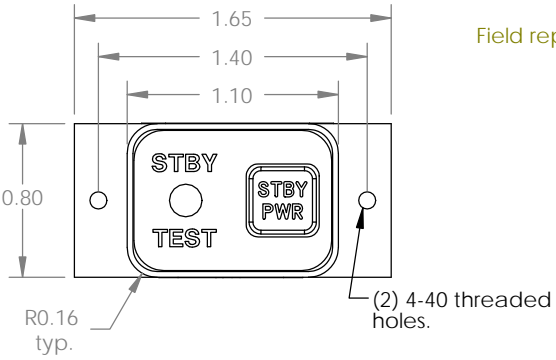
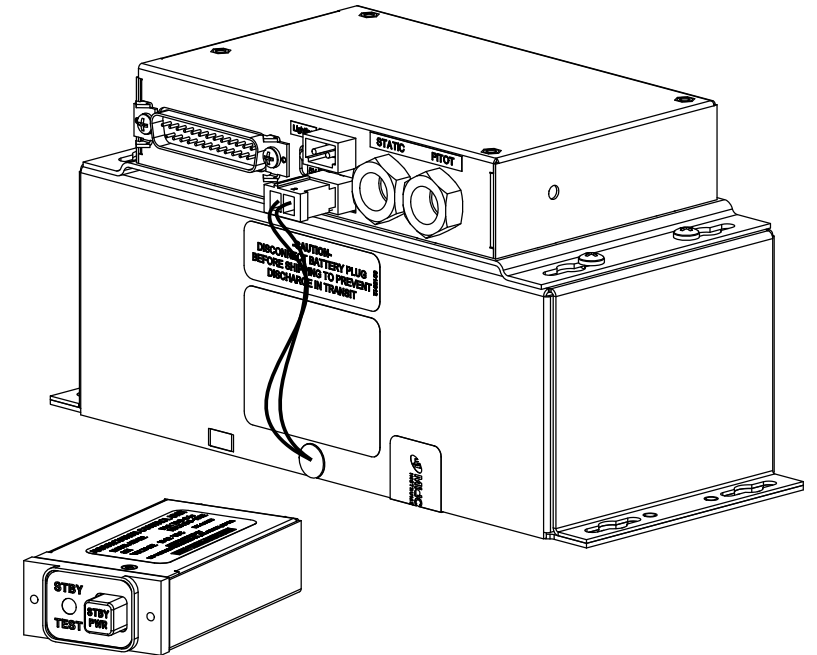
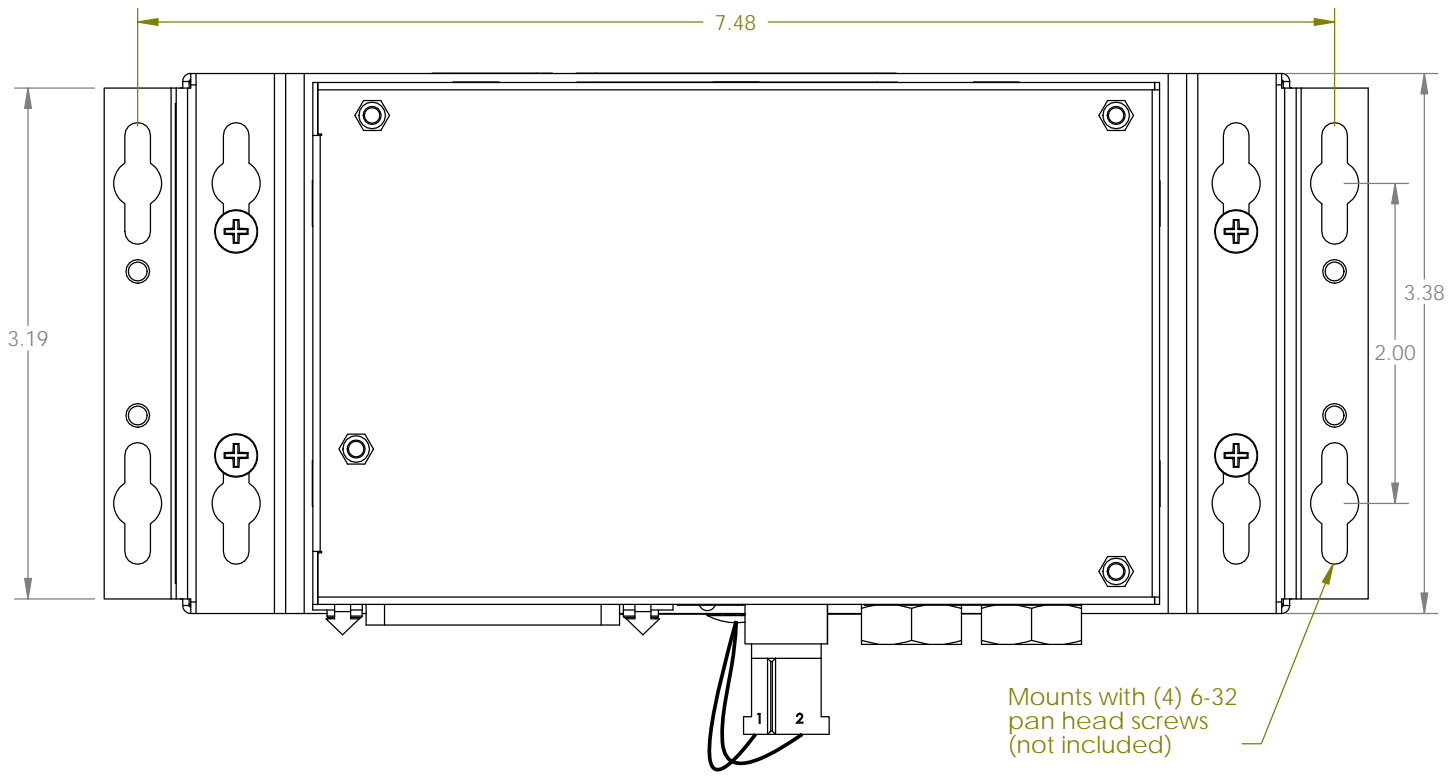
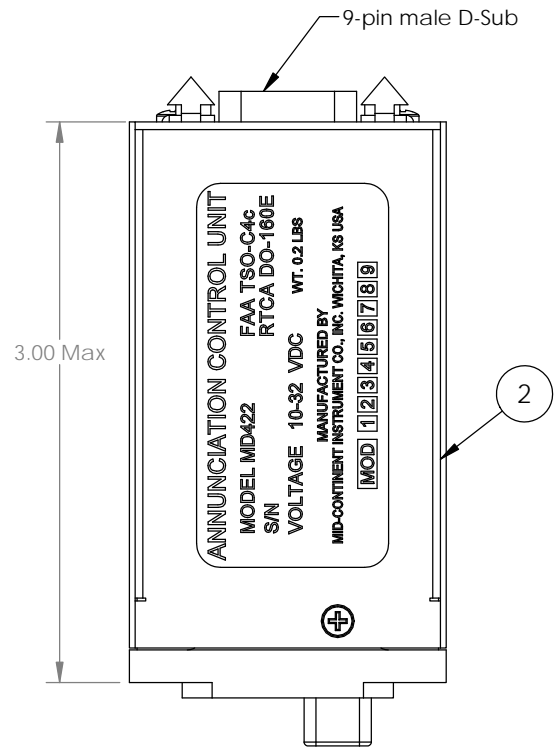
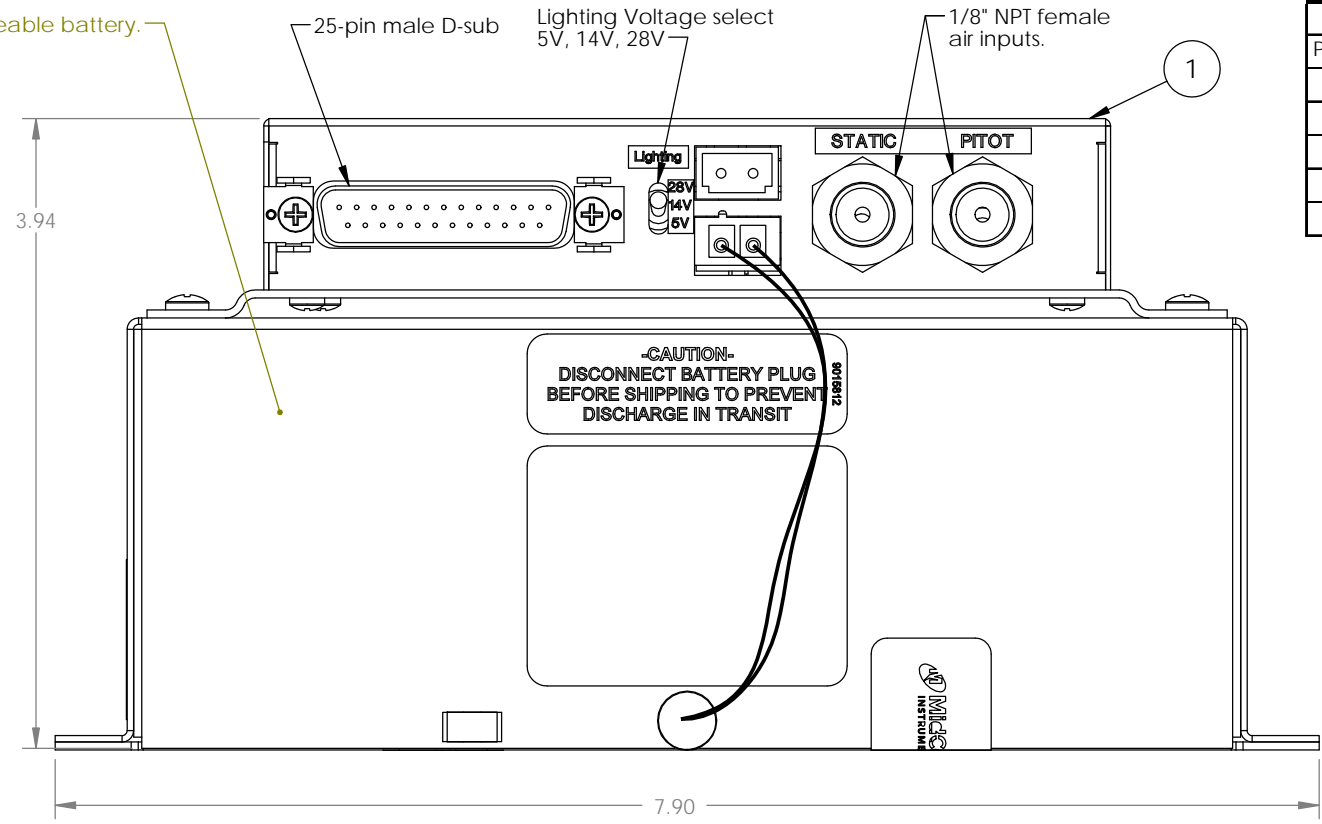


Configuration	
Dash #	

ECO	Rev.	Description	Date	Approved
	A	Initial Release	10/12/09	BAW/JDS
5823	B	Logo update and addition of the model name	08/24/12	BMC/BCM



Field replaceable battery.



MD420-1 BACKUP BATTERY SYSTEM PINOUT					
ANNUNCIATOR PINOUT			BATTERY MODULE PINOUT		
Pin #			Pin #		
1	Annun. Green	6	STBY PWR Switch	1	10-32VDC Power Input
2	Annun. Sensor	7	Reserved	2	Power Out
3	Annun. GND	8	Annun. White	3	Aircraft Power GND
4	Annun. Red	9	Reserved	4	Power GND
5	Annun. Yellow			5	Aircraft Lighting Bus
				6	STBY Lighting Bus
				7	STBY Lighting Bus
				8	STBY Lighting Bus
				9	Aircraft Lighting GND
				10	STBY Lighting GND
				11	STBY Lighting GND
				12	STBY Lighting GND
				13	Reserved
				14	Reserved
				15	Reserved
				16	Reserved
				17	Reserved
				18	Air Switch
				19	Annun. Green
				20	Annun. Red
				21	Annun. Yellow
				22	Annun. White
				23	STBY PWR Switch
				24	Annun. Sensor
				25	Annun GND

SPECIFICATIONS	
Model Number	TS420-1
Power Input	10 to 32 VDC
Power Output	18V nominal @ 1.8A max
Output Capacity	2.5AH @ 0.1C rate
Weight	4.9 lbs (battery module) 0.2 lbs (annunciator)
Certification	FAATSO-C4c and RTCA DO-160E RTCA DO160E Environmental Category D1S2AER(B1G)XXXXXXXXZZAZ[ZC][WF]M[A3H33]XXAX
Mating Connector	MD25F20JVL0 25-pin D-Sub female or equivalent MD9F20JVL0 9-pin D-Sub female or equivalent
Annunciator Lighting	LED Backlit, automatic internal dimming
Battery Charging	Automatic recharging when main power is present
Compatibility	Supplies primary power output (18V nominal) and

OPERATION		
Battery Annunciation	STBY PWR Button: White (LED backlit)	Press and hold to test battery Press to manually activate battery
	STBY Text: Amber	Flashes bright for 1 minute after power loss in manual mode Steady dim state when operating on battery power
	TEST Text: Green or Red	Indicates Pass/Green or Fail/Red during battery test

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES.
 TOLERANCE:
 FRACTIONAL= ±1/64
 .XX= ±0.015
 .XXX= ±0.005
 .XXXX= ±0.002
 ANGULAR= ±0.5°
 CONCENTRICITY: 0.005 TIR
 BREAK ALL SHARP EDGES
 THREADS PER MIL-S-7742

DRAWN:
BAW
9/30/2009

APPROVED:
JDS
10/12/2009

This document discloses proprietary information of Mid-Continent Instrument Co. It may be reproduced or disclosed only with written permission of Mid-Continent Instrument Co. and is not to be used in any way detrimental to the interests of Mid-Continent Instrument Co.

TITLE:
Emergency Power System

SCALE: 1:2 DO NOT SCALE THIS DRAWING

TRUE BLUE POWER
 A division of Mid-Continent Instrument Co., Inc.

PART NUMBER:
MD420-1

SHEET: 1 of 1

Item	Qty	Part Number	Description
1	1	MD421-1	Battery Module, MD421-1
2	1	MD422	Annunciator Control Unit, MD420 System
3	1	7014517	Connector Kit, 25-pin
4	1	8017287	Connector Kit, 9-pin